STATE OF WISCONSIN

SENATE CHAIR Howard Marklein

316 East, State Capitol P.O. Box 7882 Madison, WI 53707-7882 Phone: (608) 266-0703



ASSEMBLY CHAIR Mark Born

308 East, State Capitol P.O. Box 8952 Madison, WI 53708-8953 Phone: (608) 266-2540

JOINT COMMITTEE ON FINANCE

MEMORANDUM

To:

Members

Joint Committee on Finance

From:

Senator Howard Marklein

Representative Mark Born

Date:

February 11, 2022

Re:

SWIB Report to JFC

Attached is a report on all costs and expenses charged to the trust fund under management during the prior quarter as well as the number of full-time equivalent positions created or abolished during the quarter from the State of Wisconsin Investment Board, pursuant to s. 25.17(13), Stats.

This report is being provided for your information only. No action by the Committee is required. Please feel free to contact us if you have any questions.

Attachments

HM:MB:jm



February 11, 2022

Senator Howard Marklein, Co-Chair Joint Committee on Finance P.O. Box 7882 Madison WI 53707-7882

Senator Robert Cowles, Co-Chair Joint Legislative Audit Committee P.O. Box 7882 Madison WI 53707-7882

Secretary Kathy Blumenfeld Department of Administration 101 East Wilson Street P.O. Box 7864 Madison, WI 53707-7864 Representative Mark Born, Co-Chair Joint Committee on Finance P.O. Box 8952 Madison WI 53708-8952

Representative Samantha Kerkman, Co-Chair Joint Legislative Audit Committee P.O. Box 8952 Madison WI 53708-8952

FEB 1 1 2022 St. Finance

Dear Senator Marklein, Senator Cowles, Representative Born, Representative Kerkman, and Secretary Blumenfeld:

State statutes require the State of Wisconsin Investment Board (SWIB) to report all costs and expenses charged to the trust funds under management during the prior quarter as well as the number of full-time equivalent positions created or abolished during the quarter¹. The information contained in this report is for the quarter ended December 31, 2021.

			 				T	railing 4 Qtr	
Total Cost of Management Summary		1Q2021	2Q2021	3Q2021		4Q2021		Total	% of Total
Internal Operating Expenses									
Operating Budget Expenses	\$	11,960,506	\$ 39,468,133	\$ 12,882,486	\$	14,225,300	\$	78,536,425	60.6%
Custodial, Investment Operations & Banking		1,597,860	1,667,094	1,712,812		1,752,273		6,730,039	5.2%
Legal		412,361	237,486	642,792		821,846		2,114,485	1.6%
Investment Research & Consulting		8,716,569	9,505,930	10,099,210		10,521,546		38,843,255	30.1%
Total Internal Operating Expenses	\$	22,687,296	\$ 50,878,643	\$ 25,337,300	\$	27,320,965	\$	126,224,204	97.5%
Securities Lending Agent Expenses		906,556	884,053	706,762		784,251		3,281,622	2.5%
Total SWIB Operating Costs	\$	23,593,852	\$ 51,762,696	\$ 26,044,062	\$	28,105,216	5	129,505,826	100.0%
External Investment Management Fees									
Externally Managed Separate Account Fees									
Beta One & Other - Separately Managed	\$	11,815,893	\$ 12,846,225	\$ 15,897,862	\$	9,818,853	\$	50,378,833	8.8%
Supplemental Information - External Fund Fe	es								
Real Estate	\$	16,246,132	\$ 16,794,113	\$ 17,175,742	\$	17,693,091	\$	67,909,078	11.9%
Private Equity & Venture Capital		42,901,170	57,849,368	56,476,982		61,375,539		218,603,068	38.1%
Hedge Funds		60,313,126	43,171,220	46,910,532		42,415,360		192,810,238	33.7%
Beta One & Other - External Funds		3,971,887	15,468,903	18,697,235		4,722,875		42,860,901	7.5%
Total External Investment Management Fee	\$	135,248,208	\$ 146,129,829	\$ 155,158,353	\$	136,025,718	\$	572,562,108	100.0%
Total Cost of Management	\$	158.842.060	\$ 197,892,525	\$ 181,202,415	3	164,130,934	· 5	702.067,934	

¹Wisconsin Statutes Section 25.17 (13m): All investment-related costs and expenses charged to the WRS Trust Funds, State Investment Fund, State Life Insurance Fund, Historical Society Endowment Fund, Injured Patients and Families Compensation Fund and UW Trust Fund. Investment transaction expenses, such as trading commissions and interest expense, are included in investment returns, and therefore not included in this report.

SWIB operating costs are charged to the trust funds under management and externally managed fund fees are netted against the investment returns generated by SWIB's external fund holdings. It is important to consider costs in the context of value-added investment returns. For example, during the five years ended December 31, 2021, after consideration of all expenses, costs, and fees, SWIB generated more than \$2.2 billion in additional profits beyond what would have been generated by the benchmark portfolio SWIB is measured against. These profits all go directly into the Wisconsin Retirement System for the benefit of its beneficiaries.

Attachment A provides a breakdown of the amount and percentage of assets managed under each type of dedicated and commingled account or partnership, and the change in the amount and percentage from the prior calendar quarter. During the fourth quarter of 2021, SWIB's Board of Trustees approved 29 new staff positions to further support new investment strategies and management of the trust fund assets. SWIB's total authorized positions are 290 as shown in the table below.

Assets Under Man	agement & Posit	ions
	9/30/2021	12/31/2021
Internal Management	55.0%	53.3%
External Management	45.0%	46.7%
Total SWIB Positions	261	290

In addition, Attachment B provides details of the services provided to SWIB and their associated quarterly costs.

As new investment strategies are implemented and markets continue to evolve, SWIB will continue evaluating the most efficient means to manage the trust fund assets. Please contact us if you have any questions or comments about this report.

For definitions of the expense categories presented in the Total Cost of Management Summary table, please refer to Attachment C

Sincerely,

Edwin Denson

Executive Director/Chief Investment Officer

Attachments

cc: Members, Joint Committee on Finance

Members, Joint Committee on Audit Robert Lang, Legislative Fiscal Bureau Joe Chrisman, Legislative Audit Bureau

Total Assets Under Management

					1			
Wisconsin Retirement System (WRS)	3/31/2021	021	6/30/2021	021	9/30/2021	021	12/31/2021	2021
	Amount		Amount		Amount		Amount	
	(in millions)	Percent	(in millions)	Percent	(ji	Percent	millions) Percent (in millions) Percent	Percent
Internally Managed	\$68,456	51.6%	\$72,061	51.4%	\$72,136	51.2%	\$72,165	49.0%
Externally Managed Dedicated Accounts	35,943	27.1%	36,723	26.2%	35,978	25.5%	36,740	25.0%
Externally Managed Commingled Accounts	28,164	21.2%	31,351	22.4%	32,809	23.3%	38,311	26.0%
1 Passive Index Funds	2,864	2.2%	2,966	2.1%	2,894	2.1%	2,857	1.9%
2. Limited Partnerships	17,894	13.5%	19,692	14.1%	22,128	15.7%	26,574	18.1%
3. Actively Managed Commingled Accounts	7,406	5.6%	8,693	6.2%	7,787	5.5%	8,881	6.0%
TOTAL WRS Assets	\$132,563	100.0%	\$140,136	100.0%	\$140,923	100.0%	100.0% \$147,217 100.0%	100.0%

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46.7%	\$77,328	45.0%		44.5%	\$70,295	44.5%	\$66,255	Total External Management
53.3%	\$88,338	55.0%	\$86,906	55.5%	\$87,611	55.5%	\$82,564	Total Internal Management
			Ł					
	\$165,666		\$157,919		\$157,906		\$148,819	Total Assets Under Management
	\$2,276		\$2,225		\$2,221		\$2,148	Separately Managed Funds - Externally Managed
	\$123		\$123		\$124		\$119	Separately Managed Funds - Internally Managed
	\$16,051		\$14,648		\$15,426		\$13,988	State Investment Fund - Internally Managed

STATE OF WISCONSIN INVESTMENT BOARD Expenses for All Funds Under Management Quarter Ending December 31, 2021

EXPENSE CATEGORY ¹	SERVICE PROVIDED	E	XPENSES
Internal Operating Expenses		¢.	10,714,778
Staff Compensation	Staff Compensation	\$	2,104,907
Fringe Benefits	Fringe Benefits General Supplies & Services		1,405,615
Equipment, Supplies & Services Total Internal Operating Expenses	Control Cappings a control	\$	14,225,300
Custodial, Investment Operations and Banking Fees	M. J. O. J. J. Garden	\$	264,361
BNY Mellon Asset Servicing - Custody	Master Custody Services Investment Operating Services	Ψ	1,452,448
BNY Mellon Asset Servicing - Investment Operations Markit NA	Investment Operating Services		35,400
US Bank	Banking Fees		64
Total Custodial, Investment Operations and Banking Fees		\$	1,752,273
Legal Fees	Sevel Mark for Investment Strategies	\$	96,504
Chapman & Cutler LLP	Legal Work for Investment Strategies Legal Work for Investment Strategies	Ψ	78,072
Cox Castle & Nicholson LLP DLA Piper LLP (US)	Legal Work for Investment Strategies		173,770
Godfrey & Kahri SC	Legal Work for Investment Strategies		4,482
Purrington Moody Weill LLP	Legal Work for Investment Strategies		119,059
Quaries & Brady	Legal Work for Investment Strategies		183,426 198
Reinhart Boerner Van Deuren SC	Legal Work for Investment Strategies Legal Work for Investment Strategies		147,941
Shearman & Sterling LLP	Legal Work for Investment Strategies		18,396
Vedder Price PC Total Legal Fees	2094 11511(15) 11.100311311 0043-51-1	\$	821,846
Investment Counsel			7 500
280 First Inc	Research and Data Services	\$	7,500 750
ABG Sundal Collier Inc	Investment Research Investment Consulting Services		73,704
Adeptyx Consulting Aksia LLC	Hedge Fund Investment Consulting		193,750
Aksia LEC Alembic Global Advisors	Market Research		3,100
Alex Solutions	Research & Data Service		39,417
Ananth Seshadri	Economic Consulting Services		45,000 15,000
Aon Hewitt Investment Consulting Inc	Investment and Risk Management Research Investment Research		4,500
B Riley FBR Inc	Investment Research		114,875
Bank of America Merrill Lynch Barrington Research Associates Inc	Investment Research		2,000
BCA Research Inc	Global & Domestic Fixed Income Strategy Research		33,125
Berenberg	Investment Research		65,650 12,250
BITA Risk Limited	Risk Oversight Services Research & Data Services		28,500
Blacklight Technology Partners, LLC	Risk Services		75,000
Blackrock Financial Management Inc Bloomberg Finance LP	Market, Company, Industry & Benchmark Information		1,058,721
BMO Capital Markets Corp	Investment Research Services		27,400
BNY Mellon Asset Servicing - Eagle/Pace	Investment Consulting Services		128,000 3,400
Boenning & Scattergood Inc	Investment Research Investment Consulting		66,000
Bridge Consulting Partners Ltd Broad Street Consulting Group	Recruitment Consulting		100,000
BTIG, LLC	Investment Research		2,700
Business Intelligence Advisors, Inc.	Advisory Services		30,000
Callan Associates Inc	Investment Consulting & Performance Benchmarking		6,250 11,400
Canaccord Genuity	Investment Research Investment Research		3,500
Carnegie Inc CBOE Global Markets, Inc.	Research and Data Services		1,500
CEM Benchmarking Inc	Investment Cost Analysis		35,000
CFRA Research	Investment Research Services		23,100
Charles River System Inc	Portfolio Management Trading Software & Services		211,217 7,600
CIBC World Markets Inc	Investment Research Investment Research		6,600
CL King & Associates Codrington Japan	Investment Research		250
Colliers Securities LLC	Investment Research		5,500
Compass Point Research & Trading, LLC	Investment Research		1,000
Cornerstone Macro LLC	Macro Economic Research		44,950 28,738
CoStar Portfolio Strategy	Real Estate Consulting & Research Services Corporate Governance		30,000
Council of Institutional Investors Cowen and Company LLC	Research and Data Services		41,000
Craig-Hallum Capital Group	Investment Research		7,200
CreditSights	Credit Assessments		17,500
Cross Current Research LLC	Healthcare Sector Research		10,000
Cutter Associates	Investment Organization and Systems Consulting		17,500 16,100
DA Davidson & Co	Investment Research Investment Research		37,500
Dacheng Xiu Daiwa Capital Markets America	Investment Research		13,700
Davy Securities Limited	Investment Research		4,750
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EXPENSE CATEGORY ¹	SERVICE PROVIDED	EXPENSES
Delphi-US LLC	Investment Information Technology Consulting Services	50,538
Deutsche Bank	Tax registration fees	81,788
Dow Jones News Service	Company and Industry News Services	31,937 3,000
DTCC - EPN	Trade Settlement Service	1,359
DTCC ITP LLC	Trade Settlement Service Priyate Markets Portfolio Management Services	301,561
EFront Financial Solutions Inc Empirical Research Partners LLC	Investment Research	137,500
Euromonitor International	Research and Data Services	18,915
Evercore Group LLC	Investment Research	84,700
eVestment Alliance LLC	Research and Data Services	74,190 66,446
Exane Inc	Investment Research Financial & Economic Database	997,850
FactSet Research Systems Inc FBN Securities, Inc.	Investment Research	3,000
Finiato	Research Management Solution	50,000
FIS Data Systems Inc.	Research and Data Services	22,177
FTSE Fixed Income LLC	Real Time Index Data	37,161 15,000
Furey Research Partners LLC	Small Cap Research Actuarial Consulting	20,500
Gabriel Roeder Smith & Company Gartner Inc	Technology Sector Research	29,285
Goodbody	Investment Research	16,750
Grandview Analytics LLC	Investment Information Technology Consulting Services	91,605
Green Street Advisor	Real Estate Analytics	16,937 16,500
Guggenheim Securities LLC	Investment Research Investment Research	3,000
Handelsbanken Markets Securities Inc. Haver Analytics	Global Macroeconomic Research	22,700
Hedgeye Risk Management, LLC	Research and Data Services	15,000
HSBC Securities (USA) Inc.	Investment Research	23,500
Ice Data LP	Fixed Income Indices	10,435 22,340
IHS Markit KY3P LLC	Risk Management Services Proxy Insight Subscription	9,950
Insightia Limited Institutional Shareholder Services Inc	Proxy Voting Analysis	58,825
International Swaps and Derivatives Assn	Derivative Industry Research	12,124
Investec Securities (US) LLC	Investment Research	1,000
IPC Systems Inc	Trading Telecommunication System	8,482 3,000
Janney Montgomery Scott	Investment Research Investment Research	77,800
Jefferies Research Services LLC Joyce C Knauff & Associates	Investment Consulting	41,250
JP Morgan	Research and Data Services	15,000
Keefe Bruyette & Woods (KBW)	Investment Research	45,000 10,700
Kepler Capital Markets Inc	Investment Research Services	31,000
KeyBanc Capital Markets Inc	Investment Research Investment Information Technology Consulting Services	265,605
Keystone Consulting Inc KPMG Limited	Tax Representation Services	6,422
Kreischer Miller LLP	Investment Consulting	1,400
Law360 Legal News and Data	Investment Research	3,125 28,550
Liberum Capital Inc	Investment Research Investment Research	1,500
Longbow Securities LLC Loop Capital Financial Consulting Services	Valuation Consulting Services	2,400
Mackey LLC	Research Management System	51,436
Macquarie Capital (USA) Inc	Investment Research	24,000
Markit-EDM Limited	Data Management Software	186,509 32,200
Matrix IDM, LLC	Investment Consulting Investment Compensation Data and Analysis	86,850
McLagan Partners Inc Meketa Investment Group	Public Markets External Manager Consultant	64,980
MKM Partners	Investment Research Services	12,250
MNI Market News	Research and Data Services	1,890
Moodys Analytics	Economic, Currency & Bond Analysis	36,613 6,000
Morningstar Inc	Industrial Sector Market Research & Analysis Research and Data Services	275,537
MSCI Inc - Risk Metrics Solutions MSCI, Inc	Research and Data Services	104,088
MUFG Securities America	Investment Research	10,500
My Data Outlet International, LLC	Research and Data Services	11,000
National Bank Financial Inc	Investment Research	5,600 4,400
National Conference on Public Employee Retirement Systems	Investment Research Investment Research	11,000
Needham & Company LLC NEPC LLC	Investment Consulting Services	50,000
Nephron Research LLC	Investment Research	5,000
New Street Research LLC	Investment Research	25,000
Northland Securities	Investment Research	3,000 (9,255)
Novus Partners Inc	Profit & Loss Analytics System Investment Information Technology Consulting Services	219,000
Nuware Technology Corp NYSE Market Inc	New York Stock Exchange Data	7,517
Odeon Capital Group, LLC	Research and Data Services	7,500
Oliver James	Investment Consulting	92,292
Oppenheimer & Co Inc	Investment Research	11,500 2,930
Options Price Reporting Authority	Quote System for Options Market Access to Investment Research	12,000
Pacific Pension & Investment Institute Pac-invest	Research and Data Services	12,156
Piper Sandler & Co	Investment Research	27,000
PremiaLab	Investment Research	12,451
RCM Technologies	Investment Consulting	(20,000)

Securities Lending Agent Fees BNY Mellon Asset Servicing Securities Lending Agent Fees Total Securities Lending Agent Fees	\$ 784,252 \$ 784,252
	1,250 15,000 \$ 10,521,546 \$ 784,252
	1,250 15,000
Total Investment Counsel	1,250 15,000
Yipit, LLC Research and Data Services	1,250
Worth Charting LLC Investment Consulting	58,315
Wolverine Execution Services LLC WorldBridge Partners Inc Options Trading Platform Recruitment Consulting	1,501
Wolfe Trahan Transportation and Macro Economic Research	82,571 1,367
William Blair & Company LLC Investment Research	15,500
WestPark Capital, Inc. Investment Research	1,100
Wall Street Journal Investment Research & Information Wedbush Investment Research	9,000
V-Soft Consulting Group Inc Investment Information Technology Consulting Services	76,800 50
Visible Alpha LLC Research and Data Services	36,619
Verus Advisory Inc Virtu ITG Analytics LLC Trading Transaction Cost Analysis	17,500
Vertical Research Partners Industrial Sector Market Research & Analysis Verus Advisory Inc Benchmarking Consulting Services	42,000
Unquote Research and Data Services	3,393 20,000
Unit4 Business Software Inc Financial & Administration Services System	61,106
Tudor Pickering Holf & Co Investment Research	13,500
Trivariate Research LP Investment Research Truist Securities, Inc. Investment Research	14,146
Trepp, LLC Investment Research Triveriate Research LP Investment Research	15,000
TradeWeb On-Line Fixed Income Trading Services	9,534 47,741
Toronto Stock Exchange Market Data	18,219
The Yield Book Inc Research and Data Services	9,060
The Spaulding Group, Inc. Audit Services The University of Chicago Booth School of Business Training Services	101
The Nasdaq Stock Market, LLC Research & Data Services The Sognifing Group, Inc. Audit Services	4,500 35,000
The Leuthold Group LLC Broad Based Market Research	10,750
The Financial Times Limited Investment Research	372
Telsey Advisory Group Consumer Sector Research The Benchmark Company LLC investment Research	3,700
TD Securities (USA) LLC Investment Research Telsey Advisory Group Consumer Sector Research	2,500 31,250
Systems Accountants Investment Information Technology Consulting Services	80,640 2,500
SWIFT SC Research and Data Services	574
SVB Leerink Research and Data Services	18,500
Stifel Nicolaus & Company Incorporated Investment Research Stuart Frankel & Co., Inc Investment Research	5,000
StepStone Group Real Estate Real Estate Consulting Services	56,471 42,000
StepStone Group Private Equity Consulting Services	300,102
Stephens Inc Investment Research	24,746
Solve Advisors Inc Investment Research Statista Investment Research	468
Snowflake Inc Research and Data Services	25,000 9,000
SMBC Nikko Securities America Inc Investment Research	23,750
Simcorp USA, Inc. Investment System	1,632,335
Sharp Decisions Inc Investment Information Technology Consulting Services Sidoti & Company LLC Investment Research	8,500
SemiAnalysis Investment Research Sharp Decisions Inc Investment Information Technology Consulting Services	200 82,576
SEB Securities Inc Investment Research	1,000
Seaport Global Securities LLC Research and Data Services	12,480
Santander Investment Securities Inc Investment Research	14,400
S&P Global Market Intelligence Industry & Corporate Research Sanford C Bernstein & Co LLC Investment Research	164,113
Rystad Energy AS Investment Research	22,500 118,357
Russell Investment Group Index Data	8,932
Roth Capital Partners Investment Research	4,800
Rosenblatt Securities Inc Investment Research	15,500
Responsible Investor Research and Data Services Robert W. Baird & Co. Investment Research	60,500
Renaissance Macro Research Macro Economic Research	37,250 581
Refinitiv Research Pricing (Autex, Baseline, FirstCall)	84,532
Redburn Europe Limited Investment Research	25,850
EXPENSE CATEGORY ¹ SERVICE PROVIDED	EXPENSES

¹All costs reported are on an accrual basis except for internal operating costs which are on a cash basis of accounting. Negative expense amounts are due to accrual adjustments and/or other miscellaneous adjustments.

Explanation of Expenses

Internal Operating Expenses

Internal operating expenses consist primarily of staff compensation and fringe benefits. SWIB employs a staff of professional investment and support staff to manage the trust fund assets. Other internal operating expenses consist of office equipment, supplies, business travel, information technology equipment and services, and general services.

Custodial & Banking Fees

Wisconsin Certificate of Deposit Program: Under a contract with SWIB, Bankers' Bank administers the program under which the State Investment Fund (SIF) purchases certificates of deposit from Wisconsin-based banks and thrifts. Most administrative costs are paid by the participating banks. SWIB's expenses help underwrite other administrative costs, such as insurance that SWIB requires to be purchased.

BNY Mellon: Provides master custodial and administrative services (safekeeping of assets, income collection, valuations and accounting) for public and private domestic and foreign securities in the Wisconsin Retirement System (WRS), the SIF, and the other separately managed trust funds. In addition, SWIB receives performance measurement and analytical services through its contract with BNY Mellon, which serves as the official book of record for SWIB's accounting and performance measurement functions. BNY Mellon provides data and analytical tools used by SWIB for compliance and risk management. These include global collateral management, data management, and hosting services. Fees for these services are established by contract.

US Bank: The State of Wisconsin contracted with US Bank to be the state's working bank. The fees paid to US Bank by the SIF reflect bank service charges that are not directly applicable to the fund participants.

Legal Fees, Services, and Expenses

Under authority delegated by the Attorney General, pursuant to s. 25.18 (1) (a) Statutes, SWIB may employ legal counsel for any matters arising out of the scope of its investment authority. This includes legal services relating to bankruptcies, class actions, private markets transactions, fiduciary advice, securities law, investment litigation, and other similar matters. The Attorney General annually reviews and approves a list of law firms to provide investment legal services for SWIB.

Investment Counsel

Current law gives SWIB the authority to employ investment counsel in any matters arising out of the scope of its investment authority. Investment research and services provided include global market, industry, economic and company information, financial and performance analytics, news information, pricing and exchange data, credit ratings, financial modeling, economic forecasting, trading services, and a variety of Board consultations. These services enable SWIB to perform due diligence on current and future holdings and assist in monitoring investments.

Securities Lending Agent Fees

Securities lending programs generally earn income through the reinvestment of cash collateral posted by borrowers and through the collection of fees for loans where non-cash collateral is posted. SWIB's securities lending income is shared with the agent to pay the costs associated with the administration of the program. The securities lending agent fees are no longer netted with income and are reported as securities lending agent fee expenses starting on July 1, 2019.

Externally Managed Separate Account Fees

External asset managers have been delegated authority within guidelines established by SWIB to determine investment strategy and purchase securities in SWIB's name within a SWIB account. Fees are typically assessed as a percentage of the market value of assets under management and in some cases, fees are based on investment performance.

External Funds Fees

SWIB invests in separate legal entities managed by external investment managers to gain exposure to select strategies including Public Markets, Private Equity, Venture Capital, Real Estate and Hedge Funds. In exchange for their investment management services, the external managers charge a fee within the entity they manage. Fees are typically assessed as a percentage of the market value of assets under management, commitments, and in some cases are based on investment performance. While the fees charged to these external vehicles do not meet the statutory definition of a cost or expense to SWIB, they are currently included in SWIB's total cost of management. Accordingly, these fees are reported as supplemental information.